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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/971,779	10/04/2001	Johnnie R. Crean	ALFALE.031CP1	2523

20995 7590 08/28/2002

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EXAMINER

GUTMAN, HILARY L

ART UNIT	PAPER NUMBER
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3612

DATE MAILED: 08/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/971,779

Applicant(s)

Crean

Examiner

Hilary Gutman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Oct 4, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 6) ☐ Other: _____

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DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 102, 112, 114, 140, 128.

2. The drawings are objected to because:

✓ In Figure 1 reference number "10" is shown but this should instead be "102" since the lead line is apparently pointing to the chassis and since no reference number "10" is present in the specification.

✓ Also in Figure 1, the lead line for reference number "171" the intake is faded and not solid and further is not apparently pointing to the intake (as seen in Figure 2).

✓ Finally, in Figure 1 there is a lead line (on the ^{right} ~~left~~ hand side of the page) above the lead line for reference number 126, which does not have a reference number corresponding thereto.

✓ In Figures 2 and 3, adjacent reference number 172 "(typ)" is shown which is unclear. Perhaps this should be removed in both instances or defined in the specification for clarity.

✓ 3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 1, 101, 120 (Figure 1).

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "interconnected coach panels"

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(claims 1-8), "interior trim panels", the "structural panels" (claims 9-16), and the vertical walls and roof (claims 4 and 13) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

5. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities:

✓ On page 1, line 3, in the phrase "U.S. Provisional Application No. (unknown," the applicant should insert "60/240,270" since this is apparently the correct application number.

✓ On page 5, [0015], the first sentence is not complete.

✓ On page 7, [0022], line 8, "c.g." should be "center of gravity" for clarity. Also [0023], line 6, discloses rails 112, 114, which are not shown in the drawings.

✓ ~~On page 8, [0027], line 6, discloses "passenger seats 128" which are not shown. Also on~~
page 8, [0028], line 4, "commonly" is unclear.

✓ On page 9, [0030], line 6, "esthetic" appears to be misspelled and should be "aesthetic".

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✓ On page 10, [0032], line 4, it is unclear whether the applicant intended to state "center of mass" or if the applicant meant instead the "center of gravity" as previously stated on page 7.

✓ Also on line 6, "roof 140" is disclosed but not shown in the drawing figures.

Appropriate correction is required.

✓
7. The use of the trademark "Freightliner" and "Ford Motor Company" (page 3) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

✓ 8. The abstract of the disclosure is objected to because: on lines 1-2, "for ventilating and regulating" should be "ventilates and regulates". On line 6, it is unclear whether the applicant intended to state "center of mass" as disclosed or center of "gravity" as previously disclosed on page 7 of the specification. Also on lines 6-7, "so equipped" is awkward and should perhaps be deleted. Correction is required. See MPEP § 608.01(b).

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Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 6-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "coach panels" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitations "adjoining inner surfaces", "coach panels", "inner surfaces", and "interior trim panels" in line 2. There is insufficient antecedent basis for these limitations in the claim.

Claim 8 recites the limitations "the common air intake" in line 1, "inner surfaces" in line 2, "coach panels" in line 2, "adjoining surfaces" in line 2, "interior trim panels" in line 3, "adjoining coach panel" in line 3, and "the adjoining interior trim panels" in lines 3-4. There is insufficient antecedent basis for these limitations in the claim. In addition, on line 4, "a box structure" is recited which is unclear as to what features of the invention the applicant intends to define.

Claim 9 recites the limitations "the weight" in line 5 and "the interior" in line 6. There is insufficient antecedent basis for these limitations in the claim.

Claim 10 recites the limitation "the interior" in line 2. There is insufficient antecedent basis for this limitation in the claim.

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Claim 14 recites the limitations "structural panel" and "interior trim panel" in line 2. There is insufficient antecedent basis for these limitations in the claim.

Claim 15 recites the limitations "structural panels" and "interior trim panels" in line 2. There is insufficient antecedent basis for these limitations in the claim.

Claim 16 recites the limitations "adjoining structural panels" in line 2, "adjoining interior trim panels" in line 2, "adjoining structural panel" in line 3, and "adjoining interior trim panels" in line 3. There is insufficient antecedent basis for these limitations in the claim. In addition, "a box structure" is recited on line 4 which is unclear as to what features of the invention the applicant intends to define.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1, 3-4, 9-10, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillick et al. '545.

For claim 1, Gillick et al. '545 disclose a heating, ventilation, and air-conditioning (HVAC) system 38B (Figure 11) for a mobile vehicle having an interior area enclosed by

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interconnected coach panels 31, the hvac system comprising: a furnace unit and an air-conditioning unit 118 wherein the furnace and air-conditioning units are adapted to be positioned below a floor 24 of the interior area of the vehicle; a single air intake 119, 121 directing air from the interior area to the furnace and the air-conditioning units.

Gillick et al. '545 further comprise a single outlet duct 30 and at least one register 34, 35 (Figures 5 and 13) in communication with the outlet duct 30 directing air from the hvac system into the interior area of the mobile vehicle. The coach panels 31 comprise a plurality of vertical walls 22, 23 and a roof 25, 41, 42.

For claim 9, Gillick et al. '545 disclose a mobile vehicle (Figure 11) having structural panels and interior trim panels, the mobile vehicle comprising: a frame defining a floor plane 24; an HVAC system 38B wherein the majority of the weight of the HVAC system is positioned below the floor plane; and a common air intake 119 directing air from the interior of the mobile vehicle to the HVAC system.

In addition, Gillick et al. '545 disclose the HVAC system further comprising a furnace and air-conditioning unit 118 wherein the furnace and air-conditioning unit are positioned below the floor plane.

Gillick et al. '545 do not disclose the mobile vehicle being a motorhome or the interior area specifically being an interior living area.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided this hvac system upon a motorhome as an obvious

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expedient since it would be convenient and comforting to provide motorhomes with the hvac system of Gillick et al. '545.

13. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillick et al. '545, as modified, and as applied to claims 1 and 9 above, and further in view of the well known prior art.

Gillick et al. '545, as modified, lack the hvac system further comprising a filter or filter assembly positioned within the air intake.

The well known prior art teaches motor homes with hvac systems having filters and filter assemblies and further teaches providing filters within air intakes in order to clean and purify the air (thereby removing dust and dirt) prior to heating or cooling the air and exhausting the air to occupants of the vehicle (see Jackson 4,953,449, Warman et al. 4,531,453, and Geyer 4,724,748).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the hvac system of Gillick et al. '545, as modified, with a filter or filter assemblies as taught by the well known prior art within the air intake in order to clean and purify the air.

14. Claims 5-8 and 14-16, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillick et al. '545, as modified, and as applied to claims 4 and 13 above, and further in view of Stanton et al. '116.

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Gillick et al. '545, as modified, lack the air intake comprising inner surfaces of the coach panels and inner surfaces of interior trim panels of the motorhome and further lack the coach panels and the trim panels defining a box structure of the air intake.

Stanton et al. '116 discloses a heating, ventilation, and air-conditioning (HVAC) system for a vehicle having an interior area enclosed by interconnected coach panels, generally 76, the hvac system comprising: a heating and air-conditioning unit; an air duct, generally 23, and a chamber (Figure 4) direct air from the heating and air-conditioning units to the interior area. Stanton et al. '116 teach forming the air duct and chamber by creating a box structure of coach or structural panels and interior (or internal) trim panels.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the air intake duct of Gillick et al. '545, as modified, out of a box structure of coach/structural panels and interior trim panels as taught by Stanton et al. '116 in order to make the interior of the motorhome more attractive and minimize the unpleasant view of the duct and in order to reduce the amount of interior space the duct consumes thereby providing more room in the interior living area of the motorhome.

15. Claims 1, 3-4, 9-10, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillick et al. '473.

Gillick et al. '473 disclose a heating, ventilation, and air-conditioning (HVAC) system 36 (Figures 1-2) for a passenger vehicle having an interior area enclosed by interconnected coach

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panels 18, 19, the hvac system comprising: a furnace unit 37; an air-conditioning unit 38 wherein the furnace and the air-conditioning units are adapted to be positioned below the interior area of the vehicle (Column 7, lines 6-14); a single air intake 44 directing air from the interior area to the furnace and the air-conditioning units.

Gillick et al. '473 disclose the system further comprising a single outlet duct 26 and at least one register 28a in communication with the outlet duct directing air from the hvac system into the interior area of the vehicle. The coach panels 18, 19 comprise a plurality of vertical walls and a roof 20.

For claim 9, Gillick et al. '473 disclose a passenger vehicle having structural panels 18, 19 and interior trim panels 23, 24, the vehicle comprising: a frame defining a floor plane 21; an HVAC system 36 wherein the majority of the weight of the HVAC system is positioned below the floor plane; and a common air intake 44 directing air from the interior of the vehicle to the HVAC system.

Gillick et al. '473 also disclose the HVAC system further comprising a furnace and air-conditioning unit wherein the furnace and air-conditioning unit are positioned below the floor plane.

Gillick et al. '473 lack the passenger vehicle being a motorhome and further lack the interior area being an interior living area.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided this hvac system upon a motorhome as an obvious

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expedient since it would be convenient and comforting to provide motorhomes with the hvac system of Gillick et al. '473.

16. Claims 5-8 and 14-16, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillick et al. '545, as modified, and as applied to claims 4 and 13 above, and further in view of Gillick et al. '473.

Gillick et al. '545, as modified, lack the air intake comprising inner surfaces of the coach panels and inner surfaces of interior trim panels of the motorhome and further lack the coach panels and the trim panels defining a box structure of the air intake.

Gillick et al. '473 disclose a heating, ventilation, and air-conditioning (HVAC) system 36 (Figures 1-2) for a passenger vehicle having an interior area enclosed by interconnected coach panels 18, 19, the hvac system comprising: a furnace unit 37; an air-conditioning unit 38 wherein the furnace and the air-conditioning units are adapted to be positioned below the interior area of the vehicle (Column 7, lines 6-14); a single air intake 44 directing air from the interior area to the furnace and the air-conditioning units. Furthermore, Gillick et al. '473 disclose an air duct, generally 25 directing air from the heating and air-conditioning units to the interior area and teach forming the air duct by creating a box structure of coach or structural panels and interior trim panels.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the air intake duct of Gillick et al. '545, as modified, out of a box structure

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of coach/structural panels and interior trim panels as taught by Gillick et al. '473 in order to make the interior of the motorhome more attractive and minimize the unpleasant view of the duct and in order to reduce the amount of interior space the duct consumes thereby providing more room in the interior living area of the motorhome.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references show other motorhomes and HVAC systems similar to that of the current invention.

18. Any inquiry concerning this communication from the examiner should be directed to Hilary L. Gutman whose telephone number is (703) 305-0496.

19. **Any response to this action should be mailed to:**

Assistant Commissioner for Patents
Washington, D.C. 20231

or faxed to:


(703) 305-3597, (for formal communications intended for entry)

or:

(703) 305-0285, (for informal or draft communications, please clearly label "PROPOSED" or "DRAFT").

hlg

August 23, 2002


D. GLENN DAYOAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600